#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 70.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-007395 Address: 333 Burma Road **Date Inspected:** 24-Jun-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 1300 **Project Name:** SAS Superstructure **OSM Departure Time:** 2130 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Japan Steel Works **Location:** Muroran, Japan

**CWI Name: CWI Present:** Yes No Pin-Tang Hsu **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower, Jacking and Deviation Saddles

## **Summary of Items Observed:**

On this date, 6/24/09, Caltrans OSM Quality Assurance Inspector (QAI) Mike Brcic was present during the times noted above for observations relative to the work being performed on cast sections in Foundry and associated built up plate sections in the Fabrication shop #4 and Foundry at Japan Steel Works (JSW), Muroran, Japan.

### WEST DEVIATION SADDLES

W2E2 ~ JSW Casting department NDE technician, H.Kohama #86, was finishing a Post machining Wet MT of Saddles trough. The results will follow by way of report submitted by JSW QC personnel, from Foundry. See conversation below regarding discussion related to orientation of cast to built up plate section.

W2W1 ~ Assembled Section has now been Post Weld Heat Treated and being cleaned by shot blasting.

W2W2 ~ QA Inspector observed welders S.Watanabe 08-5159 and M.Matudate 08-5151 following procedure SJ-3011-7 as they used SMAW process, 4.8mm E9018 electrode with all actions monitored by QC CWI Mr. Chung Fu Kuan and later by CWI Pin-Tang Hsu.

W2W3 ~ Saddle Casting is located in No. 4 Fabrication Shop. Built up Plate Section was observed by QA Inspector awaiting shot blast cleaning, then layout, also in Fabrication Shop#4.

#### TOWER SADDLES

T1-2 ~ While located in Fabrication Shop #4, 150mm stiffener plates 8ST-22 and 8ST-23 are being welded by welders M.Yamashita 73-4195 and T.Watanabe 08-5153, using FCAW 1.6mm, TM55 consumable wire and

# WELDING INSPECTION REPORT

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procedure SJ-3012-8-2. The weld parameters and the monitoring were continued, randomly verified by QC CWI Mr. Pin-Tang Hsu.

#### **EAST SADDLES**

E2E1 ~ ECS on casting repairs has been drafted and released for approval, cast awaits in Foundry. Splay plate cover has been sent out for Post Weld Heat treat.

E2W1 ~ Per QA Inspector's observance the cast section is in Foundry currently being ground mechanically at its repair locations. Bearing plate was idle in Fabrication shop #4.

West Jacking Saddle ~ Cast Section is being carbon arc shaped in the Foundry by one individual.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with applicable contract documents.

## **Summary of Conversations:**

On this day, QA Inspector, Mike Brcic had opportunity to speak to JSW representatives Mr. K.Sato and Mr. H. Kon in length regarding a condition noted on his Daily Weld Inspection Report dated 6/19/2009. After clarifying their positions regarding the orientation and relationship between cast to built up section on W2E2, it was understood by both parties that the saddle casting was installed 180 degrees out from drawing specifications. The Contractor, JSW, will be preparing letter to state the current condition with the appropriate form of communication still under review.

Current status on W2E2 is, fully welded to its built up section, Post Weld Heat Treated, final machining complete, next sequence will be the final Dimensional Inspection.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 1(510)385-5910, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Brcic,Michael	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer